

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

SUMMARY OF DATA OBTAINED IN BASE-LINE STUDY ON  
LINERBOARD DURING JUNE AND JULY, 1966

Project 1108-13

Report

to

TECHNICAL DIVISION

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

September 21, 1966

# THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

## SUMMARY OF DATA OBTAINED IN BASE-LINE STUDY ON LINERBOARD DURING JUNE AND JULY, 1966

### PART I. GENERAL

	<u>Current Report</u>	<u>Previous Report</u>
Period	June-July, 1966	April-May, 1966
No. of mills	22	23
No. of samples	116	139
Nonparticipants:	<ol style="list-style-type: none"> <li>1. Int'l. Paper Co. (Gardiner)</li> <li>2. St. Regis (Pensacola)</li> <li>3. Western Kraft</li> </ol>	<ol style="list-style-type: none"> <li>1. St. Regis (Pensacola)</li> <li>2. Western Kraft</li> </ol>
New participants:	None	None

### PART II: QUALITY DATA

#### A. Summary of Data

Test	Report	<u>Current Mill Data</u>			12-Month Cum. FKI Av.
		Max.	Min.	Av.	
Basis Weight, lb./1000 ft. <sup>2</sup>	Cur.	43.4	41.6	42.5	42.5
	Prev.	43.1	41.1	42.4	42.5
Caliper, pt.	Cur.	13.3	11.8	12.6	12.6
	Prev.	13.6	11.8	12.5	12.7
Bursting Strength, p.s.i.g.	Cur.	118	100	110	110
	Prev.	120	99	110	111
M.D. Elmendorf Tear, g./sheet	Cur.	380	278	324	327
	Prev.	384	265	324	328
C.D. Elmendorf Tear, g./sheet	Cur.	407	326	373	374
	Prev.	414	317	371	375

B. Trends in Quality Data in Current Report  
 (Reference being data from previous report)

Basis Weight:	Increased from 42.4 to 42.5
Caliper:	Increased from 12.5 to 12.6
Bursting Strength:	Same as previous report
M.D. Elmendorf Tear:	Same as previous report
C.D. Elmendorf Tear:	Increased from 371 to 373

No  
 Significant  
 Changes

PART III. CALIBRATION DATA

A. Summary of Data

Range, %	Current Report		Previous Report		6-Month Average, %
	No. of of Mills	%	No. of of Mills	%	

Basis Weight

+ 0.5	8	36.4	11	47.8	45.5
+ 1	21	95.5	21	91.3	88.0
+ 2	21	95.5	22	95.7	97.1
+ 3	21	95.5	23	100.0	100.0
+ 4	22	100.0			

Caliper

+ 0.5	2	9.1	0	0.0	4.7
+ 1	6	27.3	7	30.4	35.0
+ 2	15	68.2	17	73.9	75.7
+ 3	19	86.4	20	87.0	87.9
+ 4	21	95.5	21	91.3	95.5
+ 5	22	100.0	23	100.0	100.0

Bursting Strength

+ 0.5	2	9.1	2	8.7	9.1
+ 1	7	31.8	10	43.5	34.6
+ 2	13	59.1	17	73.9	61.9
+ 3	17	77.3	20	87.0	78.6
+ 4	18	81.8	22	95.7	86.2
+ 5	18	81.8	22	95.7	90.8
+ 7.5	21	95.5	22	95.7	97.0
+ 10	21	95.5	23	100.0	98.4
+ 13	22	100.0			100.0

B. Trends in Calibration Data

For each test, current agreement between Institute and mill data is good and compares favorably with the data for previous reports.

Note good agreement at  
+ 1% range.

Note good agreement at all  
 ranges.

Note good agreement at all  
 ranges with data for  
 previous six months.

PART III. CALIBRATION DATA (Continued)

A. Summary of Data

B. Trends in Calibration Data

Range, %	<u>Current Report</u>		<u>Previous Report</u>		6-Month Average, %
	No. of of Mills	%	No. of of Mills	%	

M.D. Elmendorf Tear

+ 0.5	1	5.0	3	14.3	6.5
+ 1	4	20.0	3	14.3	15.0
+ 2	6	30.0	5	23.8	26.5
+ 3	8	40.0	9	42.9	39.7
+ 4	10	50.0	9	42.9	46.6
+ 5	13	65.0	13	61.9	54.7
+ 7.5	16	80.0	17	81.0	74.9
+10	19	95.0	20	95.2	88.1
+12.5	19	95.0	20	95.2	96.6
+15	20	100.0	20	95.2	96.6
+20			21	100.0	96.6
+25					100.0

Note good agreement at  
 + 5% range.

C.D. Elmendorf Tear

+ 0.5	1	5.0	2	9.5	9.8
+ 1	6	30.0	3	14.3	18.3
+ 2	7	35.0	5	23.8	33.5
+ 3	8	40.0	10	47.6	46.6
+ 4	12	60.0	12	57.1	56.6
+ 5	13	65.0	13	61.9	65.1
+ 7.5	17	85.0	17	81.0	78.2
+10	18	90.0	19	90.5	88.2
+12.5	18	90.0	19	90.5	88.2
+15	19	95.0	20	95.2	93.2
+20	20	100.0	21	100.0	100.0

Note good agreement at  
 + 5% range.